ABSTRACT

An improved cathode material for nonaqueous electrolyte lithium electrochemical cell is described. The preferred active material is ε-phase silver vanadium oxide ($Ag_2V_4O_{11}$) coated with a protective layer of a metal oxide, preferably γ-phase SVO ($Ag_{1.2}V_3O_{1.8}$). The SVO core provides high capacity and rate capability while the protective coating reduces reactivity of the active particles with electrolyte to improve the long-term stability of the cathode.